
A New Species of *Monochilus* (Lamiaceae) from Brazil

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ABSTRACT. A new species, *Monochilus obovatus* P. D. Cantino, is described from Goiás, Brazil. It differs from the only previously known species of *Monochilus* in leaf shape, calyx size, and corolla shape.

The genus *Monochilus* Fischer & C. A. Meyer has traditionally been placed in the Verbenaceae but was transferred to Lamiaceae by Cantino et al. (1992), along with many other genera formerly classified as Verbenaceae. *Monochilus* is unusual in having alternate to subverticillate leaves and a racemose inflorescence, whereas most Lamiaceae have opposite leaves and a cymose inflorescence (often a thyrse). Racemes and alternate leaves also occur frequently but not universally in *Amasonia* L. f., probably the closest relative of *Monochilus*. The two genera are distinguished by corolla shape (unilabiate in *Monochilus* vs. subactinomorphic to weakly zygomorphic in *Amasonia*) and the absence in *Monochilus* of the brightly colored calyx and floral bracts that characterize *Amasonia*.

Until now, *Monochilus* was thought to be monotypic, comprising only *M. gloxiniifolius* Fischer & C. A. Meyer, which is endemic to the states of Rio de Janeiro and Espírito Santo in coastal southeastern Brazil. The new species described here, *Monochilus obovatus*, is known only from two flowering specimens collected in gallery forest in Goiás cerrado, about 600 miles northwest of the nearest known locality of *M. gloxiniifolius*. The first specimen (US) was encountered in the process of preparing a description of the genus for Kubitzki's (1990-) *Families and Genera of Vascular Plants*. A duplicate (MBM) was subsequently borrowed from the collector, G. Hatschbach, but attempts to locate other specimens in Brazilian herbaria were unsuccessful.

Monochilus obovatus has the diagnostic features of the genus (i.e., alternate leaves, racemose inflorescence, unilabiate corolla) but differs from *M. gloxiniifolius* in four characters. The leaves of *M. gloxiniifolius* are ovate to elliptical, with a petiole 1–3 cm long; those of *M. obovatus* are narrowly obovate to oblanceolate and either sessile (US specimen) or tapering gradually to a petiole up to 1.5

cm long (most leaves on the MBM specimen). The flowering calyx of *M. gloxiniifolius* is 5–6 mm long, vs. 8.5–11 mm long in *M. obovatus*. The corolla limb of *M. gloxiniifolius* is shorter than the tube, whereas the corolla limb in *M. obovatus* is much longer than the tube. Although few specimens of either species exist, the four distinctions noted here, together with the 600-mile separation of their ranges, strongly suggest that they represent distinct species.

Calyx shape is variable in *Monochilus obovatus*. In the MBM specimen, the calyx is subactinomorphic as in *M. gloxiniifolius*, whereas the sinus between the lower two calyx lobes in the US specimen is much deeper than the other four sinuses. If additional collections are made in the future, examination of this character in a larger sample of both species would be worthwhile.

Monochilus obovatus P. D. Cantino, sp. nov.

TYPE: Brazil. Goiás: São João da Aliança, rodovia para Vãozinho, mata de galeria (zona de cerrado), 9 Feb. 1994, G. & M. Hatschbach 60244 & J. M. Silva (holotype, US #3290138; isotype, MBM #165645).

A *Monochilo gloxiniifolio* foliis anguste obovatis, calyce 8.5–11 mm longo, et limbo corollae tubo longiore differt.

Perennial herb, pubescent with \pm straight, multicellular, nonglandular hairs, more densely so upward. Leaves alternate to subverticillate, clustered below inflorescence, sessile or tapering to a petiole; petiole (if present) up to 1.5 cm long; blade 7–11 cm long, 2.5–4 cm wide, narrowly obovate to oblanceolate, cuneate at base, broadly acute to obtuse at apex, denticulate; upper surface evenly pubescent with \pm straight hairs; lower surface densely pubescent on principal veins, sparsely so elsewhere. Inflorescence a terminal raceme, hirsute; bracts narrowly oblanceolate, 5–8 mm long; bracteoles paired in upper half of pedicel, linear. Calyx (in flower) 8.5–11 mm long, exteriorly hirsute, subactinomorphic to zygomorphic, sinus between lower 2 lobes sometimes much deeper than other sinuses; tube campanulate; lobes 5, ovate to broadly lanceolate, acute to attenuate. Corolla white, unilabi-

ate (upper lip only); tube cylindrical, deeply cleft on lower side, 5 mm long; limb 5-lobed, 8–9 mm long, 4 outer lobes oblong to ovate, median lobe obovate and larger than others. Stamens 4, slightly didynamous, attached near top of corolla tube, slightly exerted from tube; filaments pubescent at base; anther thecae parallel, not confluent at dehiscence. Ovary unlobed; style apex with two very short, equal to subequal lobes. Fruit unknown.

KEY TO THE SPECIES OF *MONOCHILUS*

- 1a. Leaves ovate to elliptical, petiole 1–3 cm long; flowering calyx 5–6 mm long; corolla limb shorter than tube; coastal southeastern Brazil
 *M. gloxiniifolius*
- 1b. Leaves narrowly obovate to oblanceolate, sessile or with petiole up to 1.5 cm long; flowering calyx 8.5–11 mm long; corolla limb much longer than tube; Goiás *M. obovatus*

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Literature Cited

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